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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,282

12/16/2003

Walter J. Kulpa

F-748

6577

7590

03/17/2006

George M. Macdonald

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EXAMINER

HSIEH, SHIH WEN

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/737,282

Applicant(s)

KULPA, WALTER J. 

Examiner

Shih-wen Hsieh

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 4-7, 9-17, 19-25 and 27 is/are rejected.  
7) ☒ Claim(s) 8, 18 and 26 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

***Claim Objections***

1. Claims 1 and 6 are objected to because of the following informalities:

In regard to:

Claim 1:

Line 8, please change "the cover membrane" into "a cover membrane" to correct a minor lack of antecedent basis problem. Also the preamble of claim 1 has been amended to a printer from a postage meter printer. Please amend the same to all of the claims other than claim 1 in the same fashion, e.g., claim 4, etc.

Lines 9-10, per telephone conversation with attorney George Macdonald on March 7, 2006 have been changed to: "the cover membrane is a vapor permeable membrane sealed across the opening of the tray".

Claim 6:

Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 is the same to the last recitation in claim 1 and not constitutes a further limitation of claim 1 to which claim 6 is indirectly depending on.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 4-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawicki (US Pat. No. 6,267,465) in view of Wada (JP 411001005A).

In regard to:

Claim 1:

Sawicki teaches:

A printer comprising:

a print head (12, fig. 1), refer to col. 2, lines 54-55;

a purge unit (1000, fig. 1) for removing ink from the print head, refer to col. 3, lines 19-26; and

an ink tray assembly (200, figs. 2 and 5) for receiving ink removed from the print head by the purge unit, refer to col. 3, lines 19-26 and lines 44-49;

wherein the ink tray assembly includes:

a tray having an opening, refer to fig. 5, where the top portion in fig. 5 is the opening, where a top cover (not shown, refer to col. 4, line 36+) is to be placed;

an absorbent pad (100, fig. 4) held in the tray under a cover membrane.

The device of Sawicki DIFFERS from claim 1 in that it does not teach the underlined portion above.

Wada teaches a waste ink tank (10, figs. 1 and 2) for receiving waste ink purged from recording head 3 (fig. 1) of an ink jet printer (fig. 1). The tank has a sheet (21, fig. 2) covers the tank, and the sheet is gas permeable, refer to [0010].

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device of Sawicki to include a sheet, which is gas permeable as taught by Wada for the purpose of allowing ink vapor to pass to the atmosphere and left solid ink in the tank so as to increase holding capacity of the tank.

Wada in the device of Sawicki as modified in view of Wada further teaches:  
the cover membrane is a vapor permeable membrane sealed across the opening of the tray, refer to Wada [0010] and the English Solution, where Wada used the word "fuse" instead of "seal".

The device of Sawicki as modified in view of Wada further DIFFERS from claim 1 in that it does not teach:

a hole in the cover membrane for sealing to a port of the purge unit.

From Wada's fig. 2, it can be seen the purged waste ink is from a side of the tank (at location 23), Not from the top as that in the instant application.

And with a view of Wada's fig. 2, the top of the tank is cover with a protective cover (22) with a plurality of windows (22a), which are believed to the exits of the ink vapor. However, the location 23 where the purged waste ink is from can be disposed on

Art Unit: 2861

the top protective cover, and still not interfere with the exit of the ink vapor. This is simply a rearrangement or relocation problem.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device of Sawicki as modified in view of Wada to rearrange the purged waste ink from the recording head from its originally side location to the top of the tank, since it has been held that rearranging part, in this case the location of the purged waste ink connection to the tank, of an invention involves only routine skill in the art, refer to MPEP 2144.04 VI C. After such rearrangement, ink still comes out from the pump (either the pump in Sawicki's fig. 1 or the pump 9 in Wada's fig. 1) through the tube (either the tube 75 in Sawicki's fig. 1 or the tube 11 in Wada's fig. 1) into the connection (23) into the tank.

As to a hole in the cover membrane, since a sleeve (130, figs. 4 and 5) in Sawicki's invention is protruded from the top, it is naturally to provide a hole in the cover membrane in the device of Sawicki as modified in view of Wada so as to allow the sleeve still protrude in the way as it was before.

Claim 4:

Sawicki in the device of Sawicki as modified in view of Wada further teaches: wherein the absorbent pad has a channel (112, figs. 3-5) therein positioned in alignment with the hole in the cover membrane.

Claim 5:

Sawicki in the device of Sawicki as modified in view of Wada further teaches:

Art Unit: 2861

wherein the tray includes a post (130, figs. 4 and 5) extending upwardly from a floor of the tray and engaged by the channel (112) in the absorbent pad.

Claim 7:

Wada in the device of Sawicki as modified in view of Wada further teaches wherein the cover membrane includes at least one of polypropylene and polyethylene, refer to Wada's claim 2 and [0010].

Claim 9:

The postage meter according to claim 1, wherein the cover membrane is of a material adapted to allow vapor to evaporate through the material and to substantially prevent waste ink from passing through the material.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim 10:

The postage meter according to claim 9, wherein the material includes at least one of polypropylene and polyethylene.

Rejection:

This claim is rejected on the basis as set forth for claim 7 discussed above.

Claim 11:

A printer comprising:

a print head;

a purge unit for removing ink from the print head; and

an Ink tray assembly for receiving ink removed from the print head by the purge unit;

wherein the ink tray assembly includes:

a tray; and

barrier means, bonded to a rim of the tray, for substantially preventing waste ink from exiting the tray upon an upside-down orientation of the tray.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above. As to upside-down orientation of the tray, please refer to Wada's English Solution; [0010] and [0015]. Wada only teaches when the waste ink tank is inclined, the waste ink is prevented from flowing outside. Upside-down in this claim can be seen as an extremity of the inclination of the waste ink tank, and also since the sheet is either heat welding or ultrasonic welding to the tank and providing fluid-tight state, therefore, even in the upside-down condition, the sheet, which corresponds to the barrier in this claim is able to substantially preventing waste ink from exiting the tray.

Claim 12:

The postage meter according to claim 11, wherein the barrier means includes a membrane that substantially closes an opening of the tray.

Rejection:

This claim is rejected on the basis as set forth for claim 11 discussed above.

Claim 13:



The postage meter according to claim 12, wherein the ink tray assembly also includes:

an absorbent pad held in the tray under the membrane.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim 14:

The postage meter according to claim 13, further comprising a hole in the membrane for sealing to a port of the purge unit.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim 15:

The postage meter according to claim 14, wherein the absorbent pad has a channel therein positioned in alignment with the hole in the membrane.

Rejection:

This claim is rejected on the basis as set forth for claim 4 discussed above.

Claim 16:

The postage meter according to claim 15, wherein the tray includes a post extending upwardly from a floor of the tray and engaged by the channel in the absorbent pad.

Rejection:

This claim is rejected on the basis as set forth for claim 5 discussed above.

Claim 17:

The postage meter according to claim 12, wherein the membrane includes at least one of polypropylene and polyethylene.

Rejection:

This claim is rejected on the basis as set forth for claim 7 discussed above.

Claim 19:

The postage meter according to claim 11, wherein the barrer means includes a material adapted to allow vapor to evaporate through the material.

Rejection:

This claim is rejected on the basis as set forth for claim 9 discussed above.

Claim 20:

A waste ink tray assembly for use in a printer, the assembly comprising:

a tray;

an absorbent pad held in the tray; and

barrier means, bonded to a rim of the tray, for substantially preventing waste ink from exiting the tray upon an upside-down orientation of the tray.

Rejection:

This claim is rejected on the basis as set forth for claim 11 discussed above.

Claim 21:

The waste ink tray assembly according to claim 20, wherein the barrier means includes a membrane that substantially closes an opening of the tray.

Rejection:

This claim is rejected on the basis as set forth for claim 12 discussed above.

Art Unit: 2861

Claim 22:

The waste ink tray assembly according to claim 21, further comprising a hole in the membrane for sealing to a port of a waste ink purge unit.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim 23:

The waste ink tray assembly according to claim 22, wherein the absorbent pad has a channel therein positioned in alignment with the hole in the membrane.

Rejection:

This claim is rejected on the basis as set forth for claim 4 discussed above.

Claim 24:

The waste ink tray assembly according to claim 23, wherein the tray includes a post extending upwardly from a floor of the tray and engaged by the channel in the absorbent pad.

Rejection:

This claim is rejected on the basis as set forth for claim 5 discussed above.

Claim 25:

The waste ink tray assembly according to claim 21, wherein the membrane includes at least one of polypropylene and polyethylene.

Rejection:

This claim is rejected on the basis as set forth for claim 7 discussed above.

Art Unit: 2861

Claim 27:

The waste ink tray assembly according to claim 20, wherein the barrier means includes a material adapted to allow vapor to evaporate through the material.

Rejection:

This claim is rejected on the basis as set forth for claim 9 discussed above.

***Allowable Subject Matter***

4. Claims 8, 18 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claims 8, 18 and 26 is the inclusion of the limitation of wherein the cover membrane is formed at least in part as a bellows. It is this limitation found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Wada's reference (JP 411001005A) has been used in this office action. Mainly, Wada teaches a sheet to cover a waste ink tank for an ink jet printer. The sheet is vapor permeable and is being welded to the tank to provide a fluid tight situation.

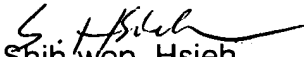
Art Unit: 2861

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.

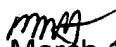
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SHIH-WEN HSIEH**  
**PRIMARY EXAMINER**

  
Shih-wen Hsieh  
Primary Examiner  
Art Unit 2861

SWH

  
March 14, 2006